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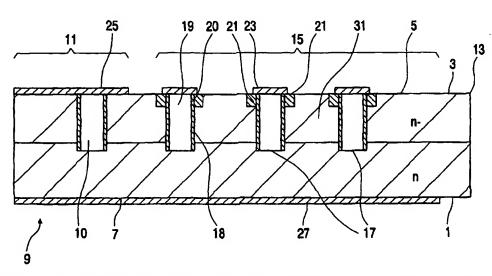
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(54) Title: SEMICONDUCTOR DEVICE WITH EDGE STRUCTURE



(57) Abstract: A semiconductor device has an edge termination region (15) having a plurality of trenches (17). Conductive material (20) and insulating material (19) is formed at the trenches, and surface implants (21) are formed on either side of the trenches. A conductive bridge (23) connects the surface implants (21) to allow equilibrium to be reached in reverse bias.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L29/41 H01L29/06

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Α	EP 1 011 146 A (ST MICROELECTRONICS SRL) 21 June 2000 (2000-06-21) cited in the application column 5, line 54 - line 57; figure 12 -/	1,2,5, 8-10

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Morvan, D

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	1	FC1/1B 03/02929
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A	VAN DALEN R ET AL: "BREAKING THE SILICON LIMIT USING SEMI-INSULATING RESURF LAYERS" PROCEEDINGS OF THE 13TH INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & ICS (ISPSD '01), OSAKA, JP, 4 - 7 June 2001, pages 391-394, XP001052044 IEEE, NEW YORK, NY, USA ISBN: 4-88686-056-7C figures 1B,1C	1,2,5,6, 9,10
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